APPENDIX M

100 CHEMICAL SUBSTANCES WITH HIGHEST ANNUAL USAGE RATE (GALLONS)

The usage rate described the amount of each chemical that was used in gallons during the previous 12 months before the NOHSM survey was conducted at the mine. The data in Appendices M and N are mutually exclusive from each other, with some exceptions which are noted with asterisks (*).

*NOTE: Chemical also occurs in Appendix N — 100 CHEMICAL SUBSTANCES WITH HIGHEST USAGE RATE (POUNDS).

| CHEMICAL NAME | TOTAL VOLUME |
|---|------------------------|
| *Natural Gas | 172,968,803,734,288 |
| Methane | 2,078,517,366 |
| *Acetylene | 1,174,357,859 |
| Diesel Fuel No. 2 | 760,940,728 |
| Nitrogen | 228,506,181 |
| 95% Argon 5% Oxygen | 131,690,141 |
| Phosphorus Yellow | 63,000,000 |
| Gasoline, Unleaded | 37 <i>,</i> 273,612 |
| Diesel Fuel No. 1 | 34,479,188 |
| Gasoline, Leaded | 30,422,519 |
| Argon | 19,874,342 |
| Diesel Fuel No. 6 | 17,457,797 |
| *Propane | 13,542,728 |
| 75% Argon 25% Carbon Dioxide | 12,105,599 |
| *Hydrogen | 11,608,094 |
| *Diesel Fuel No. 5 | 10,855,195 |
| Waste Fuel Piped Fuel NEC | 9,948,564 |
| Diesel, Fuel NEC *Ammonia | 9,091,754 |
| Gasoline | 7,396,426 |
| *Sulfuric Acid | 6,244,109 4,888,132 |
| Liquid Petroleum Gas | 4,336,297 |
| #5 Fuel Oil (Reclaim) | 4,011,259 |
| *Sodium Hydroxide | 3,592,569 |
| Methyl Acetylene-Propadiene Mixture | 3,537,100 |
| Diesel Fuel No. 4 | 3,506,041 |
| *Carbon Dioxide | 3,498,558 |
| Kerosene | 3,379,431 |
| *Sodium Hydrosulfite | 2,195,751 |
| Nitrous Oxide | 1,438,576 |
| *Hydrogen Chloride | 1,275,638 |
| *Sílicic Acid, Disodium Salt | 988,108 |
| *Calcium Chloride | 723,508 |
| Propylene | 548,447 |
| Lignin Sulfite | 510,551 |
| Mercury | 500,303 |
| Stoddard Solvent | 430,291 |
| Ligninsulfonate | 401,920 |
| *Chlorine | 387,250 |
| Butane | 379,108 |
| Burner Fuel | 355,466 |
| Magnesium Hydroxide | 355,007 |
| Sodium Dimethylnaphthalene Sulfonate | 344,935 |
| Helium Sulfurio Acid, Managemenium Salt | 315,927 |
| Sulfuric Acid, Monoammonium Salt Waste Oil | 283,872 |
| Methyl Alcohol | 108,645 |
| Magnesium Chloride | 108,315 |
| Phosphoric Acid | 81,453 |
| Argon 90% Methane 10% | 80,270 68,023 |
| *Nitric Acid | 68,923 60,169 |
| Bunker Oil | 60,168 50,000 |
| Methyl Chloroform | 34,593 |
| monty, omorotom | 34,093 |

| CHEMICAL NAME | TOTAL VOLUME |
|-----------------------------------|--------------|
| Naphtha, Coal Tar | 34.482 |
| Methane, Chlorodifluoro- | 34,042 |
| 2-Butanone | 32,452 |
| Mineral Oil | 31,897 |
| Xylene | 28,947 |
| Ethylene Glycol | 27,360 |
| Diesel No. 2-70%, Kerosene 30% | 23,145 |
| Carbon Monoxide | 21,497 |
| Hypochlorous Acid, Sodium Salt | 20,330 |
| Hydrogen Peroxide | 18,904 |
| *Tetrachloroethylene | 12,019 |
| Guar Gum | 10,398 |
| Diesel Fuel No. 3 | 10,200 |
| Isopropyl Alcohol | 9,507 |
| Argon 75% Helium 25% | 8,079 |
| Tallow Amine | 7,500 |
| Ethanol | 5,004 |
| Diesel Fuel Blend No. 1 And No. 2 | 5,000 |
| Pine Oil | 4,001 |
| Acetic Acid | 3,880 |
| Hydrogren Fluoride | 3,266 |
| Petroleum White | 2,934 |
| Acetone | 2,898 |
| Isobutyl Aicohol | 2,887 |
| Denatured Alcohol | 2,376 |
| Ammonium Hydroxide | 2,367 |
| Toluene | 2,339 |
| *P. Glycol | 2,000 |
| Glycerine Reiford Lincold Oil | 1,872 |
| Boiled Linseed Oil | 1,601 |
| Coal Tar Creosote | 1,585 |
| Butyl Alcohol | 1,452 |
| *Graphite | 1,342 |
| Naphtha Gas Reagent Alcohol | 1,100 |
| Triaryl Phosphate | 1,051 |
| 1,2-Propanol | 990 |
| Hexone | 916 |
| Methane, Dibromo- | 898 |
| Oil. Linseed | 874 |
| *Chromic Acid and Chromates | 823 |
| Acetylene Tetrabromide | 775 |
| Metaquat | 710 |
| *Methyl Isobutyl Carbinol | 666 |
| Al, Aluminum-MF Unknown | 625 605 |
| Potassium Fluoride | 605 |
| Bleach | 577 557 |
| | 337 |

APPENDIX N

100 CHEMICAL SUBSTANCES WITH HIGHEST ANNUAL USAGE RATE (POUNDS)

The usage rate described the amount of each chemical that was used in pounds during the previous 12 months before the NOHSM survey was conducted at the mine. The data in Appendices M and N are mutually exclusive from each other, with some exceptions which are noted with asterisks (*).

*NOTE: Chemical also occurs in Appendix M — 100 CHEMICAL SUBSTANCES WITH HIGHEST ANNUAL USAGE RATE (GALLONS).

| CHEMICAL NAME | TOTAL MASS |
|--|----------------------------|
| Coal | 31,596,029,962 |
| Limestone | 7,336,988,786 |
| Gypsum | 6,689,097,281 |
| Carbonic Acid, Sodium Salt, Monohydrate | 2,600,000,028 |
| Carbonic Acid, Sodium Salt (2:3) | 2,521,057,195 |
| Alundum | 2,416,323,397 |
| Coke | 2,369,128,057 |
| Calcium Oxide | 2,300,966,324 |
| Glycol Alkaldiamine Acetate | 1,291,890,214 |
| Silica, Crystalline | 1,251,368,386 |
| Coke (Petroleum) | 1,173,207,404 |
| Kaolin | 1,036,934,250 |
| Ammonium Nitrate | 565,323,850 |
| Magnetite | 538,391,828 452,046,734 |
| Iron Oxide (Fe ₃ O ₄) Iron Scale | 446,522,106 |
| Calcium Hydroxide | 433,408,885 |
| Iron Ore | 373,109,638 |
| Aluminum Hydroxide (Al (OH),) | 358,630,019 |
| Gypsum-Anhydrite Rock | 297,754,507 |
| Magnesite | 291,718,821 |
| Sodium Phosphate, Primary | 240,000,009 |
| *Sulfuric Acid | 220,659,158 |
| Bentonite | 215,333,732 |
| Shale | 203,883,281 |
| Sodium Oxide | 203,797,747 |
| Coal Ash | 200,000,000 |
| Fe, Iron | 189,371,628 |
| Phosphoric Acid, Disodium Salt | 189,000,033 |
| Phosphorus Oxide (P ₂ O ₅) | 143,800,010 |
| Slag Boron Tribromide | 134,861,104 |
| *Sodium Hydroxide | 132,000,000 131,366,699 |
| *Hydrogen Chloride | 120,764,663 |
| *Chlorine | 83,932,375 |
| Carbonic Acid Disodium Salt | 76,177,594 |
| Soapstone | 54,113,182 |
| *Silicic Acid, Disodium Salt | 53,108,354 |
| *Natural Gas | 45,215,260 |
| Sodium Cyanide | 45,092,950 |
| Aluminum Calcium Oxide | 41,280,000 |
| Pyrites | 38,400,000 |
| Bauxite | 37,611,835 |
| Portland Cement | 37,243,329 |
| Chalcopyrite | 24,000,000 |
| *Graphité | 23,821,564 |
| Iron Salts, Soluble | 20,202,021 |
| Creosote Ties | 19,093,079 |
| *Ammonia | 13,855,875 |
| Zn, Zinc-MF Unknown Cement | 13,533,237 13,144,898 |
| *Calcium Chloride | 12,464,945 |
| Copper Slag | 10,833,500 |
| ooppor olay | 10,000,000 |

| CHEMICAL NAME | TOTAL MASS |
|---|--------------------|
| *Hydrogen | |
| | 10,013,469 |
| Iron Pyrite Wood Pust (Nonellemenia) | 9,787,558 |
| Wood Dust (Nonallergenic) | 8,706,505 |
| Zinc Sulfate | 8,299,015 |
| Coal Tar Pitch Volatiles | 7,920,293 |
| *Acetylene | 7,543,328 |
| Zinc Solution | 7,247,339 |
| Diatomite | 6,419,202 |
| Sodium Chloride | 5,496,595 |
| *Carbon Dioxide | 5,353,140 |
| Calcium Hypochlorite | 5,133,776 |
| *Methyl Isobutyl Carbinol | 5,118,635 |
| Aluminum Sulfate | 3,977,420 |
| Oxalic Acid, Disodium Salt | 3,706,116 |
| Hydrogen Sulfide | 3,656,279 |
| Calcium Carbonate | 3,179,706 |
| Silicic Acid, Aluminum Salt, Hydrate | 3,019,847 |
| Pearl Starch | 2,970,001 |
| Silicon Carbide | 2,796,597 |
| Ferrinox Sic | 2 <i>,</i> 275,511 |
| Masonry Cement, Type N | 2,240,422 |
| *Nitric Acid | 2,192,182 |
| Titanium Dioxide | 2,011,168 |
| Sodium Chlorate | 1,989,075 |
| Sodium D-Gluconate | 1,980,751 |
| Sulfuric Acid Copper(2+) Salt (1:1) | 1,763,178 |
| Sulfur Dioxide | 1,743,161 |
| Carbon | 1,521,591 |
| Metaphosphoric Acid, Hexasodium Salt | 1,416,009 |
| Copper Solution Copper Solution | 1,348,800 |
| Sulfur | 1,306,252 |
| Starch | 1,259,581 |
| *Diesel Fuel No. 5 | 1,208,471 |
| *Tetrachloroethylene | 1,204,819 |
| Iron Oxide (Fe ₂ O ₃) | 1,203,704 |
| Feldspar | 1,151,027 |
| Lead Nitrate | 1,145,444 |
| Al, Aluminum-MF Unknown | 1,130,773 |
| *Propane | 1,104,142 |
| *Sodium Hydrosulfite | 1,079,839 |
| Kyanite | 1,027,140 |
| Ammonium Chloride | 1,000,410 |
| *Chromic Acid and Chromates | 993,77 5 |
| *Propylene Glycol | 946,872 |
| Ferrate(4-), Hexacyano-, Tetrasodium | 935,038 |
| Sulfuric Acid, Iron(2+) Salt (1:1) | 901,988 |
| Carbonic Acid, Dithio, O-Pentyl Ester, Potassium Salt | 860,732 |
| • | |

APPENDIX O

100 CHEMICAL SUBSTANCES WITH THE HIGHEST PROJECTED NUMBER OF WORKERS POTENTIALLY EXPOSED

This appendix lists the 100 chemical substances with the highest projected number of workers potentially exposed and the standard deviations for these projections. It is beyond the scope of this report to provide the projections and standard deviations for all of the data gathered by NOHSM. However, any parties that are interested in the projections and standard deviations for specific agents of interest should direct their requests to the NOHSM project officer listed in the discussion section IX of this report, or obtain the NOHSM database that is described in the NOHSM database section VI of this report and perform the calculations themselves. The number of workers that were potentially exposed to chemical substances contained in the ore being mined is not reported in this appendix. This appendix only reports those chemical substances which were purchased and then used at the mining facility. Hence, coal miners are not listed as being potentially exposed to coal, asbestos miners are not reported as being potentially exposed to asbestos, and so forth.

*NOTE: The number of projected workers potentially exposed to these mineral chemicals in this appendix does not include the number of workers employed in the corresponding mineral commodities listed in Appendix P.

| CHEMICAL NAME | NUMBER OF PROJECTED WORKERS POTENTIALLY EXPOSED | STANDARD DEVIATION |
|--|---|--------------------|
| Diesel Fuel No. 2 | 109,097 | 12,945 |
| Acetylene | 6 6,665 | 9,795 |
| Gasoline, Unleaded | 30,811 | 5,240 |
| Gasoline, Leaded | 19,893 | 4,668 |
| Diesel Fuel No. 1 | 16,852 | 6,046 |
| Propane | 11,437 | 2,594 |
| *Coal | 11,193 | 2,010 |
| Kerosene | 10,712 | 2,412 |
| Calcium Chloride | 10,513 | 5,331 |
| *Limestone | 8,918 | 4,268 |
| 75% Argon 25% Carbon Dioxide | 8,493 | 5,531 |
| Natural Gas | 8,040 | 1,546 |
| *Gypsum | 6,701 | 1,747 |
| 95% Argon 5% Oxygen | 5,516 | 5,423 |
| Suffuric Acid | 4,626 | 870 |
| Hydrogen Chloride | 4,578 | 407 |
| Sodium Hydroxide | 4,567 | 909 |
| Methyl Chloroform | 4,412 | 3,620 |
| Ammonium Nitrate | 4,333 | 3,553 |
| Stoddard Solvent | 4,307 | 2,275 |
| Calcium Oxide | 4,252 | 1,430 |
| Nitrogen | 4,042 | 2,122 |
| Gasoline | 3,901 | 2,280 |
| Naphtha, Coal Tar | 3,227 | 1,421 |
| Petroleum White | 3,110 | 3,058 |
| Xylene | 2,994 | 2,771 |
| Carbonic Acid Disodium Salt | 2,729 | 542 |
| Magnetite | 2,668 | 1,029 |
| Diesel Fuel, Nec | 2,664 | 1,206 |
| Silica, Crystalline | 2,620 | 981 |
| Aluminum Sulfate | 2,527 | 2,284 |
| Iron Oxide (Fe ₃ O ₄) | 2,423 | 1,108 |
| Calcium Hydroxide | 2,411 | 933 |
| Carbon Dioxide | 2,054 | 572 |

NUMBER OF PROJECTED

WORKERS POTENTIALLY

STANDARD DEVIATION

CHEMICAL NAME

| | EXPOSED | |
|--|----------------|-------------|
| Calcium Sulfate | 2,025 | 1,795 |
| Coke (Petroleum) | 1,887 | 1,068 |
| Ligninsulfonate | 1,719 | 1,690 |
| Argon | 1,587 | 461 |
| Mineral Oil | 1,563 | 763 |
| Coke | 1,561 | 7 51 |
| Chloroprene | 1,558 | 1,296 |
| Methyl Alcohol | 1,504 | 531 |
| Iron Scale | 1,455 | 843 550 |
| Carbonic Acid Monosodium Salt | 1,454 | 5 59 |
| Ammonium Hydroxide | 1,452 1,420 | 384 514 |
| Graphite *Iron Ore | 1,410 | 753 |
| Nitric Acid | 1,245 | 755 194 |
| Methyl Acetylene-Propadiene Mixture | 1,215 | 657 |
| Dichlorodifluoromethane | 1,178 | 653 |
| Denatured Alcohol | 1,091 | 585 |
| Carbonic Acid, Dithio, O-Pentyl | 1,001 | • |
| Ester, Potassium Salt | 1,084 | 912 |
| Fe, Iron | 1,079 | 517 |
| Silicic Acid, Disodium Salt | 1,067 | 68 6 |
| Acetic Acid | 1,066 | 240 |
| Sodium Cyanide | 1,063 | 210 |
| Methyl Isobutyl Carbinol | 1,039 | 754 |
| Acetone | 1,013 | 23 5 |
| *Portland Cement | 1,002 | 564 |
| Phenolphthalein | 974 | 184 |
| Liquid Petroleum Gas | 956 | 381 |
| Stearic Acid, Calcium Salt | 940 | 770 |
| Diatomite | 900 | 292 |
| Bauxite | 899 | 524 |
| Tetrachloreothylene | 881 | 618 |
| Cholorine | 797 | 330 |
| Chromic Acid and Chromates | 737 700 | 171 |
| Barium (Soluble Compounds) Phosphoric Acid | 726 723 | 165 189 |
| Creosote Ties | 725 716 | 704 |
| Potassium lodide | 710 709 | 704 159 |
| Methane, Dibromo- | 646 | 593 |
| Silver Nitrate | 641 | 161 |
| Ethanol | 639 | 253 |
| Ammonia | 635 | 227 |
| Tin | 594 | 166 |
| Potassium Nitrate | 590 | 409 |
| Alundum | 58 6 | 186 |
| Iron Salts, Soluble | 576 | 344 |
| Magnesium Chloride | 574 | 474 |
| Sulfuric Acid, Cobalt(2+) Salt (1:1) | 552 | 340 |
| Glycerine | 539 | 154 |
| Calcoi, Fluoride | 534 | 402 |
| Potassium Permanganate | 529 | 160 |
| Isopropyl Alcohol | 508 | 160 |
| Sodium Oxide | 499 | 408 |
| Coal Tar Pitch Volatiles | 494 | 340 |
| Mg, Magnesium-MF Unknown | 492 | 401 |
| Al, Aluminum-MF Unknown | 487 | 401 |
| Bentonite | 478 | 288 |
| Hydrogen Fluoride | 478 | 147 |
| Copper Slag | 462 | 0 |
| Sodium Chloride | 462 | 101 |

| CHEMICAL NAME | NUMBER OF PROJECTED WORKERS POTENTIALLY EXPOSED | STANDARD DEVIATION |
|---------------------|---|--------------------|
| Sulfamic Acid | 458 | 259 |
| Diesel Fuel No. 6 | 45 6 | 281 |
| Boric Acid | 442 | 103 |
| Ammonium Chloride | 433 | 146 |
| Zn, Zinc-MF Unknown | 433 | 144 |
| *Asbestos | 429 | 193 |
| Magnesite | 4 21 | 400 |

APPENDIX P

NUMBER OF WORKERS EMPLOYED IN EACH COMMODITY AT THE TIME THE NOHSM SURVEY WAS CONDUCTED

COMMODITY **WORKERS EMPLOYED-SURVEY Aluminum** 3,801 Anthracite Coal 2.299 **Aplite** 32 Asbestos 444 429 Barite 121 Beryl **Bituminous Coal** 133,079 **Boron Minerals** 1,344 7,404 Cement 10.055 Clay Copper 10.517 Feldspar 392 137 Fluorspar Gemstones 80 142 Gilsonite 4,290 Gold 5,322 Granite (Crushed & Broken) 1,005 Granite (Dimension) 1,170 Gypsum 4,245 Iron Ore 113 **Kyanite** Léad/Zinc 1,869 Leonardite 52 2,949 Lime Limestone (Crushed & Broken) Limestone (Dimension) 32,769 571 170 Lithium 157 Magnesite 102 Manganese Marble (Crushed & Broken) Marble (Dimension) 467 98 59 Mercury 35 Metal Ores, NEC 340 Mica 835 Molybdenum 2,546 Nonmetallic Minerals, NEC Oil Shale 155 244 Perlite 5,463 Phosphate Rock **Pigment Minerals** 29 372 Platium Group 1,712 Potash Pumice 143 13 **Pyrites** 218 Rare Earths Salt (Evaporated) Salt (Rock) 330 1,768 16,782 Sand and Gravel Sandstone (Crushed & Broken) Sandstone (Dimension) 2278 338 Shale (Common) 620 2,739 Silver Slate (Crushed & Broken) Slate (Dimension) 206 373 Sodium Compounds 2256 2.031 Stone, Crushed & Broken, NEC Stone, Dimension, NEC Talc, Soapstone & Pyrophyllite 111 830 Titanium 374 2.518 Traprock (Crushed & Broken) 749 Trona

| COMMODITY | WORKERS EMPLOYED-SURVEY |
|-------------------------|-------------------------|
| Uranium | 1,179 |
| Uranium - Vanadium Ores | 45 |
| Vanadium | 229 |
| Vermiculite | 277 |
| Zircon | 29 |

APPENDIX Q

100 TRADE NAME PRODUCTS WITH THE HIGHEST PROJECTED NUMBER OF WORKERS POTENTIALLY EXPOSED

| TRADE NAME PRODUCT | MANUFACTURER OR DISTRIBUTOR | NUMBER OF PROJECTE WORKERS POTENTIALI EXPOSED |
|--|--|---|
| Coal Mine Rock Dust | White's Stone Co. | 33,024 |
| WD-40 Item 42110 (Aerosol) | The WD-40 Company | 22,866 |
| Atom Arc Type 7018 | Chemtron Corp. | 12,919 |
| Lan-Lin Hand Cleaner Part No. M10-75 | Radiator Chemical Corp. | 11,396 |
| Hydraulic Fluid 100A ISO VG 100 | Century Hulburt, Inc. | 11,207 |
| Permatex Form-A-Gasket No. 2 Sealant, #80011 | Loctite Corp. | 11,126 |
| Lincoln Jetweld LH-70 Electrode, E7018, 7016 | Lincoln Electric Co. | 10,880 |
| Texaco Multifak EP-2 | Texaco Incorporated | 10,399 |
| Texaco ATF Dexron Two | Texaco Incorporated | 9,770 |
| Hobart 718 LMP Class E7018 Stock No. S116051-35 Prod. No. 90379E | Hobart Brothers Company | 9,610 |
| 447A Covered Electrodes E6013 | Hobart Brothers Company | 9,549 |
| Arcair Copperclad Pointed Electrodes Type D.C. Cat. No. 22 033 003 | Air Products & Chemicals, Inc. | 9,410 |
| Whisk Bio-degradable Waterless Hand Cleaner Stock No. U2WW White | The Metalife Company | 8,224 |
| CRC Electrical Grade Lectra Clean, #02018 (Aerosol) | CRC Chemical Inc. | 8,180 |
| Safety-Kleen 105/140 Solvent- Combustible Liquid UN1255 | Safety Clean Corp. | 8,096 |
| Super Prime Pentolite 12-25 | International Minerals & Chem Corporation | ical 7,905 |
| Linde Gouging Electrodes DC. CC. 1/4" X 12" Part No. 7012F04 | Sierra Welding Supply Co. | 7,840 |
| Gulf Crown Grease EP 2 | Gulf Oil Corp. | 7,316 |
| Nonel Primadet | Ensign-Bickford Co. | 7,164 |
| Rainbow Anti-Fog And Lens Cleaner | Lensclean Inc. | 7,136 |
| Conoco Super-Sta Grease Stock No. 9030 | Conoco, Inc. | 7,084 |

| TRADE NAME PRODUCT | MANUFACTURER OR DISTRIBUTOR | NUMBER OF PROJECTED WORKERS POTENTIALLY EXPOSED |
|--|--------------------------------|---|
| CRC Electrical Grade 2-26, #02005 (AEROSOL) | CRC Chemical Inc. | 6,742 |
| HA 30 Sand | Woodstock Trucking Compar | ry 6,514 |
| Shopcoat Primer Red Oxide E6 1RC21 | The Sherwin-Williams Compa | ny 6,397 |
| Waterless Hand Cleaner 602 | Safety Clean Corp. | 6,255 |
| Union Special #68 Hydraulic Oil | Union Oil Co. Of California | 6,239 |
| Exxon Spartan EP 320 | Exxxon Corp. | 6,227 |
| Copperclad | Air Products & Chemicals, Inc. | 6,227 |
| Linde Union Carbide Linde Hi-Dep Alloy 82 AWS/ASME-SFA5.18 ER70S-3 | Union Carbide Corporation | 6,156 |
| Oil-Dri All Purpose Absorbent | Oil-Dri Corp. Of America | 6,150 |
| Texaco Meropa 220 Code 2321 | Texaco Incorporated | 6,126 |
| Atom-Arc 8018 Electrodes Class E-8018-C3 | Chemtron Corp. | 6,109 |
| Brill*Tex Spec. GP 27 A24R 7* | Federal-Mogul Corp. | 6,047 |
| Low Silica Mine Safety Dust | E. Dillon and Company | 6,045 |
| Weld-Aid Nozzle-Kleen Number 2 Anti-Spatter Spray Non-Silicone Stock No.007022 (Aerosol) | Weld-Aid Products, Inc. | 6,023 |
| Atom-Arc 8018N AWS Class E-8018-C2 HT L81129 LOT D425C4AF | Chemtron Corp. | 5,944 |
| Permatex Anti-Seize Lubricant Part No. 133K Item No. 80078 | Loctite Corp. | 5,934 |
| Jetweld LH-70 7018 | Lincoln Electric Co. | 5,907 |
| Fleetweld 35 Electrodes E6011 | Lincoln Electric Co. | 5,905 |
| Atom Arc 9018 Electrodes | Chemtron Corp. | 5,757 |
| Texaco Marfak Multi Purpose 2 | Texaco Incorporated | 5,740 |
| Lincoln Fleetweld 5P Electrode, E6010 | Lincoln Electric Co. | 5,735 |
| Certanium 889 Machinable Cast Iron Maintenance Electrode | Certanium Alloys & Research | Co. 5,682 |
| Conoco Fleet 30W Motor Oil | Conoco, Inc. | 5,627 |

| TRADE NAME PRODUCT | MANUFACTURER OR DISTRIBUTOR | NUMBER OF PROJECTED WORKERS POTENTIALLY EXPOSED |
|--|-------------------------------|---|
| CRC Electrical/Electronic Grade CO Contact Cleaner Precision Cleaner Solvent No. 02016 (Aerosol) | CRC Chemical Inc. | 5,597 |
| Lube-Matic Welding Wire Lubricant & Cleaner Part No. 007040 | Weld-Aid Products, Inc. | 5,585 |
| Type SW Welding Electrodes E6013 | Westinghouse Electric Corp. | 5,533 |
| Nozzle-Dip Gel Anti-Spatter Gel 007094 | Weld-Aid Products, Inc. | 5,526 |
| Chevron Dura-Lith Grease EP-2 | Chevron U.S.A., Inc. | 5,523 |
| Certanium 705 Electrode | Certanium Alloys & Research (| Co. 5,521 |
| Cincinnati Milacron Grinding Wheel Spec. 5C461-K6-VSC 1P-287A 94179-1QC | Cincinnati Milacron Co. | 5,516 |
| Dual Shield Continuous Flux Cored Electrode Type Coreweld 70 E70T-1 STK. NO. 24-341002-4 | Chemtron Corp. | 5,516 |
| Atom Arc Type 9018CM Class E9018-B3 | Chemtron Corp. | 5,516 |
| Conoco EP Conolith Grease No. 1 | Conoco, Inc. | 5,433 |
| Nickel Anti-Seize Lubricant Part No. 80755 | Loctite Corp. | 5,343 |
| Bay State Abrasives Dresser Readymount Scotsman 9"X1/4" SCT 110R 7H827743B | Augusta Tool & Specialty Co. | 5,322 |
| SBS 30 Waterless Skin Cleaner | SBS Products, Inc. | 5,300 |
| Mistic Metal Mover A Cutting Fluid And Penetrant | Mistic Metal Mover, Inc. | 5,288 |
| M30 With The Hand Cream Base Stock # 0-4004 | Martin Laboratories, Inc. | 5,283 |
| Grind-O-Flex Flapper Discs ALO Resin Grit 120 CCN 521002 | Merit Abrasive Products, Inc. | 5,223 |
| Anti-Seize Lubricant Part No. 80209 | Loctite Corp. | 5,164 |
| Thermatex EP 2 | Mobil Oil Corp. | 5,050 |
| Lincoln Fleetweld 37 Electrodes, E6013 | Lincoln Electric Co. | 4,933 |
| 7M7260 Liquid Gasket Material | Caterpillar Tractor Co. | 4,933 |

| TRADE NAME PRODUCT | MANUFACTURER OR DISTRIBUTOR | NUMBER OF PROJECTED WORKERS POTENTIALLY EXPOSED |
|--|--|---|
| Liquid Wrench Part No. L1-12 (Aerosol) | Radiator Chemical Corp. | 4,933 |
| Exxon Lidok EP 2 | Exxon Corp. | 4,787 |
| Ursa Super Plus Sae 30 Product Code 2112 | Texaco Incorporated | 4,662 |
| Heavy Duty Equipment Cleaner | East Kentucky Chemical, Inc. | 4,620 |
| Gopher Grinding Disc Grade A24GP | Ansari Abrasive Manufacturin | g 4,607 |
| Wagner Dot 3 Motor Vehicle Brake Fluid 21B | McGraw-Edison Co. | 4,585 |
| Fas Loc Resin Cartridges 441 0B 0305 | E.I. Du Pont De Nemours & Co | o. (Inc.) 4,580 |
| Rock Dust | Abshire Trucking Co. | 4,537 |
| Super Hydraulic Oil 68 Product Code 7450 | Conoco, Inc. | 4,506 |
| Dowtherm 209 Coolant | The Dow Chemical Company Subsidiaries | And 4,420 |
| Go-Jo Hand Cleaner Creme Type Stock No. 1111 | Go Jo Industries, Inc. | 4,350 |
| Quintolubric 822 220 Fire Resistant Hydraulic Fluid | Quaker Chemical Corp. | 4,309 |
| Wick Climb | B & B Chemical Co., Inc. | 4,176 |
| Moreplex Moly NLGI 2 Lubricating Grease | Century Hulburt, Inc. | 4,153 |
| Caterpillar Cement, #5H2471 | Caterpillar Tractor Co. | 4,129 |
| Molub-Alloy 936 Light Open Gear Compound | Imperial Oil & Grease Compa | any, Inc. 4,120 |
| Safety-Kleen Parts Cleaner 105/140 | Safety Clean Corp. | 4,092 |
| Spartan EP 680 5376 | Exxon Corp. | 4,032 |
| Unocal Unoba EP Grease 2 | Union Oil Co. Of California | 4,027 |
| DCL 2 SAE 30 CD/SF Diesel Engine Oil | Century Hulburt, Inc. | 4,022 |
| Lubricating Grease 1643 20 | Century Hulburt, Inc. | 3,991 |
| Century Oils Moreplex 2 Lubricating Grease | Century Hulburt, Inc. | 3,930 |

| TRADE NAME PRODUCT | MANUFACTURER OR DISTRIBUTOR | NUMBER OF PROJECTED WORKERS POTENTIALLY EXPOSED |
|---|--------------------------------|---|
| Solder Seal/Gunk Dot 3 Super Heavy Duty Brake Fluid, #M44-34 | Radiator Chemical Corp. | 3,879 |
| Diesel Fuel No. 2 (Winter Blend With 5% Kerosine) | Ashland Oil Co., Inc. | 3,837 |
| Chevron Ultra-Duty Grease 2 | Chevron U.S.A., Inc. | 3,814 |
| Unoba EP-2 Grease | Union Oil Co. Of California | 3,786 |
| No. FDD1455 Dustallay | Wen-Don Corp. | 3,775 |
| Plasti-Cote Super Enamel Spray Paint T-9 Yellow | Plasti-Kote Co., Inc. | 3,710 |
| Rockdust | Benwood Limestone | 3,707 |
| Dixon Railroad Crayon 888 Red | Dixon Ticonderoga Co. | 3,698 |
| Mobil Delvac 1230 Motor Oil SAE 30 | Mobil Oil Corp. | 3,696 |
| Conoco Automatic Transmission Fluid Type F | Conoco, Inc. | 3,689 |
| Unax Sped. Hyd. 315 | Union Oil Co. of California | 3,687 |
| Three-M-Ite Elek-Tro-Cut Cloth Utility Roll | 3M Company | 3,661 |
| Dupont Tovex Water Gel Blasting Agent, N.O.S. | E.I. Du Pont De Nemours & Co | o. (Inc.) 3,660 |
| Jesco Lubricants DS-OG-WC-0 Summer 10 | Jesco Lubricants, Co., Inc. | 3,634 |

APPENDIX R

100 PRODUCT USE TERMS (PUTs) WITH THE HIGHEST PROJECTED NUMBER OF WORKERS POTENTIALLY EXPOSED

| PRODUCT USE TERM | NUMBER OF PROJECTED WORKERS POTENTIALLY EXPOSED |
|--|---|
| Fuel | 165,178 |
| Grease | 113,470 |
| Cleaner, Hand | 89,357 |
| Oil, Hydraulic | 87. 2 91 |
| Oil, Motor | 78,640 |
| Welding Rod | 65,903 |
| Lubricant, NEC | 60,571 |
| Solvent | 56,131 |
| Penetrant | 55,840 |
| Compound, Dust Control | 48,855 |
| Cleaner, Glass | 40,691 |
| Paint | 39,742 |
| Oil, Gear | 39,331 |
| Fluid, Transmission Abrasive, Grinding | 38,239 |
| Sealant | 37,020 38,837 |
| Fluid, Brake | 28,837 26,537 |
| Shielding Gas | 24,446 |
| Absorbent | 24,350 |
| Fluid, Starting NEC | 21,941 |
| Lubricant, Gear | 21,588 |
| Cleaner, Electrical Contact | 20,434 |
| Compound, Anti-Seize | 20,352 |
| Adhesive | 20,204 |
| Remover, Grease | 20,142 |
| Antifreeze, Radiator | 18,510 |
| Primer | 18,493 |
| Explosive, Detonator NEC | 18,335 |
| Oil, NEC | 16,749 |
| Welding, Wire | 16,320 |
| Cleaner, NEC | 15,046 |
| Explosive, Lead Lines | 12,784 |
| Gouging Electrode Fire Retardant | 11,896 |
| Explosive, Detonator Code | 11,852 |
| Agent, Blasting | 11,752 11,745 |
| Fluid, Hydraulic | 11,745 11,666 |
| Fluid, Cutting | 10,738 |
| Antifreeze, NEC | 10,733 |
| Cleaner, Metal | 10,459 |
| Cutting Rod | 10,274 |
| Additive, NEC | 9,990 |
| Agent, Anti-Splattering | 9,692 |
| Additive Fuel | 9,631 |
| Sand | 9,325 |
| Thinner | 8,815 |
| Abrasive, Blasting | 8,763 |
| Lubricant, Open Gear | 8,708 |
| Cement, NEC | 8,420 |
| Gasket, Liquid | 8,227 |
| Chalk | 8,060 |

PRODUCT USE TERM NUMBER OF PROJECTED WORKERS POTENTIALLY EXPOSED

| Oil, Cutting | 7,8 57 |
|----------------------------|----------------|
| Oil, Lube | 7,832 |
| Belt Dressing | 7,603 |
| Antifreeze, Airline | 7,409 |
| Sand Paper | 7,272 |
| Cleaner, General | 6,573 |
| Compound, Gasket | 6,451 |
| Compound, Water Treatment | 6,356 |
| Resin | 6,073 |
| Chemical, NEC | 6,045 |
| Gasket Material | 5,930 |
| Explosive, Boosters | 5,780 |
| Brazing Rod | 5,536 |
| Compound, Packing | 5,320 |
| Additive, Chemical Process | 5,199 |
| Emulsifier | 5,192 |
| Flocculant Size Thread | 5,074 |
| Compound, Pipe Thread | 5,055 |
| Oil, Compressor | 4,835 |
| Cement, Masonry | 4,795 |
| Agent, Wetting | 4,778 |
| Remover, Moisture Deicer | 4,549 |
| | 4,412 |
| Compound, Sweeping Plaster | 4,350 |
| Brake Equipment | 4,279 |
| Reagent, Flotation | 4,230 |
| Coolant | 4,130 |
| Compound, Steam Cleaning | 3,984 3,954 |
| Oil, Penetrating | 3,787 |
| Repellent, Insect | 3,696 |
| Remover, Gasket | 3,602 |
| Frother | 3,564 |
| Insulation | 3,488 |
| Raw Material | 3,430 |
| Soldering Rod | 3,388 |
| Antifreeze, Windshield | 3,318 |
| Brush, Wire | 3,273 |
| Cleaner, Floor | 3,266 |
| Fluid, Torque | 3,239 |
| Lubricant, Cable | 3,189 |
| Filler, NEC | 3,180 |
| Fluid, Layout | 3,089 |
| Inhibitor | 3,039 |
| Wood | 2,986 |
| Pip | 2,985 |
| Cleaner, Automotive | 2,905 |
| Indicator | 2,769 |
| Cutting Wheel | 2,735 |
| | |